Testimony of

Richard M. Vacar, A.A.E.

Director, Houston Airport System

Before the Senate Aviation Subcommittee

May 10, 2001

Chairman Hutchison, Ranking Member Rockefeller, and members of the Senate Commerce Subcommittee on Aviation, thank you for inviting me to participate in today's hearing on air traffic control delays. I am Richard M. Vacar, the Director of Aviation at the Houston Airport System in Houston, Texas. I also serve as the First Vice Chairman of the Airports Council International-North America (ACI-NA) and as a member of the American Association of Airport Executives' (AAAE) Policy Review Commission.

I would like begin by thanking all of you who served on the Senate Commerce

Committee and the Subcommittee on Aviation last year for your help in passing the Wendell H.

Ford Aviation Investment and Reform Act for the 21st Century (AIR-21). By authorizing record-level funding for the airport improvement program and allowing airports to increase much-needed capacity, Congress has already taken the first steps towards reducing the flight delays and cancellations that are negatively impacting our aviation system.

I would also like to congratulate Senator Kay Bailey Hutchison on becoming the new Chairman of the Subcommittee on Aviation. Senator Hutchison is known throughout Texas as someone who is dedicated to improving the transportation system in this country. All of us at

the Houston Airport System are grateful that she has taken such a keen interest in transportation issues during her distinguished career.

One only needs to read a newspaper or watch television news from time to time to know that the lack of airport and airway capacity and the resulting airline delays are the biggest problems facing the aviation industry and its customers today. Stories of passengers demanding better customer service and fed up with delayed and cancelled flights seem to appear on a daily basis. Unfortunately, flight delays and cancellations are expected to rise with the busy summer months just around the corner and with the overall number of passengers using the aviation system expected to grow to more than a billion per year by the end of the decade.

The fact is we have an airport and airway system that in many instances simply has not kept pace with the popular demand for air travel. A key part of that problem is that many of the nation's busiest airports simply don't have the capacity to accommodate today's traffic let alone the crush of activity projected for the immediate future. In its 1998 Aviation Capacity Enhancement Plan FAA cited twenty-seven airports that are seriously congested, experiencing more than 20,000 hours of delay annually. FAA forecasts indicate that unless airport capacity investments are made, the number of seriously congested airports will grow to thirty-one by 2007. We are not headed in the right direction.

We first need to emphasize that the aviation capacity problem is not a shortfall simply in one part of the system. Airports, air traffic control, and airlines have all struggled to try to keep up with demand -- and all have had their shortfalls. While I am now an airport manager, I have previous experience as an air traffic controller and as a pilot. I have seen the system from every perspective. The key fact is that every element of the aviation network depends on each of the

other elements. Airlines, air traffic control, and airports – each must live with the demands and the limitations imposed by the others. Airplanes delayed at the most congested airports cannot reliably serve other communities. Airlines that schedule aircraft, ostensibly to accommodate passenger preferences, must accept the constraints of airspace managers and of airports. Limitations of the air traffic control system can create delays at airports even where those airports have provided adequate runway capacity. No part of the system is an island unto itself.

Delays are caused not simply by inadequate airport capacity, or by inadequate air traffic control capacity, or by airline practices – and they cannot be solved by addressing only one or two of those problems. We have airports that serve as bottlenecks and create delays in the ATC system. We have ATC capacity problems, including in the enroute centers where bottlenecks are unrelated to scheduling or capacity at any particular airport, but the result is ground holds at many airports. And we have airlines that are both the victims of all this congestion and sometimes guilty of not doing everything they could and should do to keep passengers informed when there are flight problems.

We all have to recognize that solving the delay problem will require that we solve all parts of the problem.

Turning to the airport part of the system, the capacity benchmarks developed by the FAA will help us plan for the future. FAA Administrator Jane Garvey and her staff deserve credit for providing all of us with these capacity benchmarks and informing airports about how the agency reached its calculations. This is a planning tool that will help all of us – airports, airlines, ATC managers, and Congress – to better understand our aviation system.

The benchmarks are intended as rough estimates of runway capacity. That capacity in practice varies significantly depending on visibility, wind direction, precipitation, noise procedures, and other factors. The benchmarks should therefor not be taken as exact or absolute. Nevertheless, they do give us the ability to make useful comparisons of airport capacity, and to judge the impact of projects we have underway.

It should be noted, however, that the benchmarks estimate the capacity of runways only. They do not take into account bottlenecks in the ATC system, or on the ramp, or in the terminal, or at any other part of the passenger's journey.

What these benchmarks make clear, however, is that we need a concerted effort to get some more capacity into the system. We need to make better use of the capacity we now have in the airspace and the airports. We need to make the air traffic control system work better and, perhaps most significantly, we need to build more runways, especially at the most congested airports; and we need to do it quickly.

The George Bush Intercontinental Airport (IAH) in Houston is a good example of the substantial increase in capacity that can be achieved by building additional runways. The airport is the 13th busiest commercial airport in the United States and has been experiencing strong growth – well above the national average, for nearly a decade. Although IAH has four runways already, the airport desperately needs more capacity to keep up with increased demand. In part due to Congressional support for the Airport Improvement Program, the FAA was able last year to make a multi-year commitment for \$193 million in AIP grants toward our \$1.7 billion expansion project at IAH, including the widening and lengthening of an existing runway and the construction of a new runway on the north side of the airport.

The capacity benchmarks released by the FAA indicate that IAH can currently accommodate 120-123 take-offs and landings per hour under clear visibility conditions. Once the fifth runway is built, however, IAH will be able to accommodate 162-165 take-offs and landings per hour. With other planned improvements, those numbers will increase even further to 170-173 take-offs and landings per hour, according to the FAA benchmarks.

The construction of a new runway at IAH and other improvements will ensure that IAH can accommodate the passenger and cargo growth that the airport has been experiencing. The FAA's capacity benchmarks prove what many of us in the airport community have been saying for a long time -- the best way to substantially increase airport capacity and reduce airport-related delays is to build more runways.

Although any successful long-term plan to reduce airline delays at IAH and most other congested airports throughout the country must include a commitment to increasing airport capacity by building new runways, there are other actions that could be help reduce airline delays and cancellations in the short- and medium-terms.

Improving air traffic control is key to better operations at airports, just as increasing airport capacity is key to better ATC operations. Modernizing the National Aviation System and making structural improvements in air traffic control are critical to enhancing efficiency and capacity throughout the aviation system. Demonstrations at several airports have confirmed the benefit of early deployment of the Aircraft Vortex Spacing System (AVOSS), the Local Area Augmentation System (LAAS), and the Automatic Dependent Surveillance-Broadcast (ADS-B). The benchmarks show that while most airports can accommodate the demand they now have in clear visibility conditions, when visual separation is not possible, capacity of airports

often drops as much as 40%. This then creates backups throughout much of the rest of the system. Any technology that creates more precise control of aircraft on approach reduces this capacity gap between clear visibility and overcast conditions. LAAS will be particularly important in this regard.

In the enroute portion of the ATC system, the Free Flight Phase 1 and Phase 2 programs could also improve overall system capacity substantially. Redesign of sectors and routes, which FAA is doing constantly, also adds to capacity. And extending 1000 foot flight levels, which we now use up to 29,000 feet, above 29,000 feet, would significantly increase enroute capacity. This is something we already have the technology to do, and in fact Europe has already done it. With continued support from this Subcommittee, I hope the FAA will expedite the deployment of these and other technology initiatives that will improve system capacity.

We all need to work smarter to solve these problems, and to better understand the interrelationship between airport and airway capacity.

For example, we in Houston had worked with FAA for years on the new main runway project we now have under construction. And I am pleased to report that we had a lot of support in that effort both from FAA and the airlines. But last summer, when we were just about to get final go-ahead for construction, we got a last minute word from FAA that, while they were pleased that we were doing our part to solve the capacity problem by building a new runway, they would not request any ATC equipment to make that runway useable! We were looking at the prospect of completing a new runway and not being able to use it because FAA

had not provided any ATC for it. And this was despite a personal effort several months earlier by Administrator Garvey to get the various parts of FAA to work together on this project.

Fortunately, Congress stepped in and directed FAA to provide the missing ATC equipment, but it should not have taken that kind of external effort to make the obvious happen. I am pleased to report, however, that this year FAA has corrected the problem and has included the normal ATC work to prepare for this new runway in its annual budget. But this was an example of the different parts of the system, in this case the different parts of FAA, not working together as they should have.

With respect to airports, Congress and the Administration need to make it possible for congested airports to build capacity where they can, as quickly as possible.

What is now clear is that the current process for approving runway projects is broken, a conclusion evidenced by the fact that the timeframe for completion is often measured in decades. That's why ACI-NA and AAAE have proposed a streamlining initiative to help expedite the construction of critical airport capacity infrastructure by improving the process of project approval, environmental analysis, and permitting.

Developing the legislative initiative was a long and involved process. Over the course of the past six months, ACI-NA and AAAE held literally dozens of meetings with our members, environmental airport planning and development officials; key FAA and congressional staff; and environmental and aviation law experts, to find solutions that balance the need for continued environmental stewardship with the need to expedite the process by which airport operators, federal and state regulators, and environmental agencies review and

approve critical airport projects. That painstaking but successful process produced the Expedited Airport System Enhancement (EASE) initiative.

In summary, the EASE initiative would give priority to critical airport capacity projects, within the scope of existing environmental laws, and better integrate application of those laws into the process for approving such projects. EASE also seeks to improve procedures at FAA and elsewhere in the federal government to make sure that these critical projects receive prompt and informed attention.

Key provisions of the EASE proposal include:

- Declaration of "Critical National Airport Capacity" Projects, which would eliminate the need for the lengthy off-airport "alternatives" process for such projects;
- Priority processing by involved agencies of Critical Airport Capacity Projects;
- Establishment of an Airspace System Capacity Enhancement Council or Czar;
- Airport funding of project-specific FAA staff or consultants for expedited review of Critical Airport Capacity Projects;
- Expansion of categorical exclusions;
- Facilitation of agreements with local governments to allow additional mitigation for Critical Airport Capacity Projects;
- Requirement of realistic state air quality implementation plans; and
- Elimination of the duplicative Governor's Certificate.

We have now been working to distribute it far and wide, in numerous meetings with decision-makers, in Washington and throughout the country.

In addition, a number of individual airports have now joined with several major airlines and other key travel industry players in building a coalition focused on bringing national attention to the need for additional runways. The group, called "Runways: A National Coalition," has already been very successful in shining a spotlight on the need to build runways at key airports.

I would also note that, with ATC delays reaching record levels in 2000, good information to passengers about the status of their flights is more valuable than ever before, and is also more of a challenge to provide than ever before. This is an area where, it seems to me, we can and should do better. Airlines, airports, and the FAA have created a task force which is working out ways to get information on delays and cancellations to airport monitors and therefore to passengers in a more timely and accurate way. Fixing system capacity, and thereby reducing delays, remains the preferred solution, but we also need to recognize that the problem is severe enough that we need to find ways for passengers to cope with it until capacity enhancements can reduce the size of the problem.

In conclusion, while the shortfall we have in airport and airway capacity is very real, and is presenting genuine hardships and inefficiencies to the users of the aviation system, including airlines, passengers, and shippers, we are not helpless in the face of these problems. There are specific steps we can, and in many cases are, taking to provide more ATC capacity, to build more airport capacity, and to make the different elements of the system work better together. I have spelled out here many of those specifics. I believe that there is ultimately only

one solution to system capacity that is insufficient to meet popular demand, and that is to provide the missing capacity. I believe that with constructive and cooperative effort, we can do that, both on the airway side and on the airport side. We are not competitors – the fact is that neither the airport nor the airway side succeeds until we both succeed. I would hope we could all work in a way designed to bring the day when we all succeed a little closer.

Chairman Hutchison, Ranking Member Rockefeller, and members of the Senate Commerce Subcommittee on Aviation, thank you again for inviting me to participate in today's hearing on air traffic control delays. On behalf of the Houston Airport System, I look forward to working with you during the 107th Congress as you consider ways to reduce airline delays and increase airport capacity, and I would be pleased to try to answer any questions you might have.